19” Rack Mountable Ethernet Switch

Gigabit L2/L3 Switch

P4000a

up to 24 Giga Ethernet ports with a full-wire speed switching capacity of up to 37Mpps

- *Speed, duplex, auto-negotiation, flow control and power management on all ports*
- *VLAN support and 802.1Q tagging*
- *Port mirroring*
- *Port rights management*
- *jumbo frame support*
- *Static MAC address list*
- *Static IPM address list*
- *Port static authentication*
- *IEEE 802.1X authentication*
- *Ingress filtering*
- *Storm prevention*
- *QoS on all ports*
- *Ingress access lists*
- *Rate limiting*
- *Static / dynamic trunking (LACP)*
- *STP / RSTP*
- *IGMP snooping*

QOS :
- *Layer 2 802.1p User Priority tagging*
- *Layer 3 IP DSCP (Diffserv)*
- *Access Control Lists (L2, L3, L4)*

Multicast :
- *IGMPv1, IGMPv2, IGMPv3*

Layer 3 Routing :
- *ICMP*
- *Proxy-ARP*
- *DHCP-relay*
- *IPv4/IPv6 unicast routing*
- *IPv4 multicast routing*
- *Static IP routing (unicast and multicast)*
- *RIPv1, RIPv2 (IPv4)*
- *RIPng(IPv6)*
- *OSPFv2 (IPv4)*
- *OSPFv3(IPv6)*

Flexible management tools :
- *PBIT results*
- *Temperature information*
- *CPU load Switch state*
- *Links & Physical interfaces state*
- *Global / detailed ports statistics*
- *Bridge egress, ingress and RMON statistics*
- *Queues and ingress buffers counters*
- *IGMP snooping state by VLAN and by port*
- *MAC address table access*
- *IPM address table access*
- *STP/RTSP state*
- *802.1X authentication statistics*
- *Logging management*

RoHS 2002 / 95 / EC

Description

Based on the well-tried Interface Concept **ComEth 40xx** range, the **ComEth P4000a** switch provides a 19’’ Rack Mountable Managed Ethernet switch for industrial environment networking.

The **ComEth P4000a** offers up to 24 Giga Ethernet Ports with Link status leds.

The standard version provides 20 Gigabit RJ45 copper Ports.
Optionally, the product can be delivered with 20 Gigabit RJ45 copper Ports and 4 fiber ports ; Several types of optical interfaces are available (1000SX, 1000LX, WDM...). Please consult us for specifc configurations.

Auto-crossover, auto-polarity, auto-negotiation and automatic MAC address management make the **ComEth P4000a** a true Plug&Play switch. The Marvell Virtual Cable tester allows a remote identification of potential cable malfunctions as excessive pair skew, cable opens, impedance mismatch...

The standard equipment integrates a 110/240 VAC 50/60Hz power supply.
On demand, it can be feeded by a 18-36 VDC power supply unit.
In both cases, the PSU can be redundant (please consult us).
The switch is cooled by internal fans.

This equipment is fully compatible with the **ComEth 40xx** range (OpenVPX, cPCI & VME products). It is managed by our well proven and tested Switchware which is regularly enriched with new functionalities.

The **ComEth P4000a** complies with the Interface Concept Extended Grade.

COMETH P4000a

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Switch Management

The **ComEth P4000a** can be monitored from the console port or any of the Ethernet ports, via : HTTP (or HTTPS), SNMPv2c (or SNMPv3), CONSOLE, TELNET (or SSH).
The Switchware and configuration files can be updated by FTP (or SFTP) and it is always possible to restore the previous release or the default factory configuration.

Many additional functions are provided on this full-managed version :
Configuration of all the PHY and switch parameters, ports monitoring, static MAC address, QoS policy, Multicast and VLAN control, STP/RSTP protocols, MAC security, monitoring of all statistical counters and an extensive list of RMON counters...

The management application, named **SWITCHWARE**, is carried out by the processor of the **ComEth 4000a**.

Please consult the **Switchware User's Manual** for a comprehensive overview of all the product features.

User Interface, Controls & Termination

Font panel:
20 * RJ45 connectors & 20 Link status Leds (1)
2 switch status leds
Rear panel:
On/Off
PSU input(s) (2)
fuse(s) (2)
Mechanical ground
Console port (DB9)

Power Supply

Input type: one AC Input (2) (3)
Input Voltage: 110/240 VAC 50/60 Hz (3)
Power Consumption: TBD

(1): 24*RJ45 version and 20 * RJ45 + 4*1000SX (LC) on demand with MOQ (please consult us)
(2): redundant power supply on demand
(3): 18-36 VDC on demand

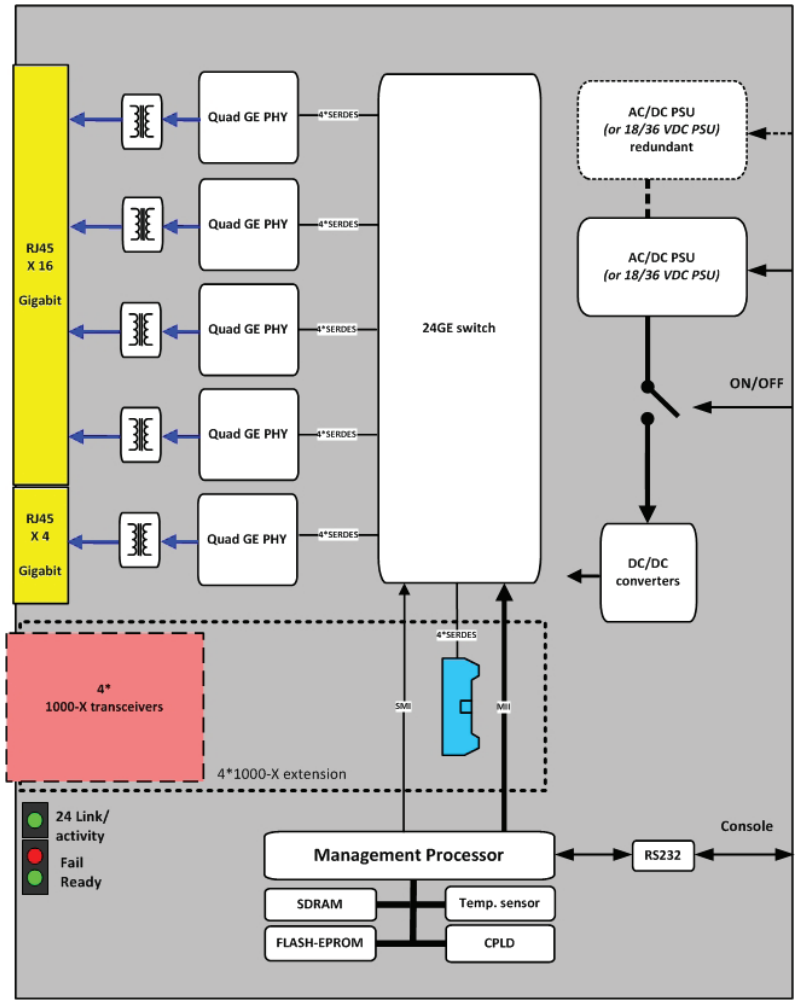
Mechanical

Wide: 19"
Height: 1 U
Deep: 200 mm
Weight: 2.850 kg

Environmental

Compliant with **Interface Concept Extended Grade**
Operating Temperature: -20° to +65°C
Storage Temperature: -45°C to +85°C
Operating Humidity: 5 to 95%
Sinusoïdal vibrations: 2G [20..2000Hz]
Random vibrations: 0.002g2/Hz [10..2000Hz]
Shock: TBC

Block Diagram



Ordering Information:

Please contact our sales department : tel. **+33 (0)2 98 573 030** - email : **info@interfaceconcept.com**

This document supersedes any earlier documentation relating to the products referred to herein. The information contained in this document is current at the date of publication. It may subsequently be updated or withdrawn without notice.

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